

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
YOR920020352US1

In Re Application Of: **Bowen Alpern, et al.**

Serial No.  
10/620,078

Filing Date  
July 15, 2003

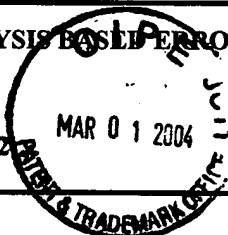
Examiner  
Unknown

Group Art Unit  
2121

Title: **STATIC ANALYSIS BASED ERROR REDUCTION FOR SOFTWARE APPLICATIONS**

Confirmation No.: 7092

MAR 01 2004



Address to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☐ the fee set forth in 37 CFR 1.17(p).

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**ANALYSIS BASED ERROR REDUCTION FOR SOFTWARE APPLICATIONS**

**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-0510/IBM** as described below.
- ☐ Charge the amount of \_\_\_\_\_
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- ☒ Charge any additional fee required.

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Steven Fischman

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Signature

Dated: **February 26, 2004**

**Steven Fischman**

**Registration No. 34,594**

**Correspondence Address**

**Customer No. 23389**

CC:



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicant(s):** Bowen Alpern, et al.

**Examiner:** Unknown

**Serial No.:** 10/620,078

**Art Unit:** 2121

**Filed:** July 15, 2003

**Docket:** YOR920020352US1 (16088)

**For:** STATIC ANALYSIS BASED ERROR  
REDUCTION FOR SOFTWARE  
APPLICATIONS

**Date:** February 26, 2004

**Confirmation No.:** 7092

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. §§1.97 and 1.98, it is requested that the following disclosures received from the Japanese Patent Office, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

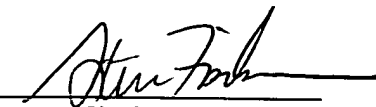
1. D. Reimer, K. Srinivas, H. Srinivasan, B. Alpern, R. Johnson, A. Kershenbaum, L. Koved, "SABER: Smart Analysis Based Error Reduction", IBM Research, Hawthorne, New York;
2. T. Ball and S. K. Rajamani, "The SLAM project: debugging system software via static analysis", In Proc. of the 29<sup>th</sup> POPL, January 2002, 1-3;

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450 on February 26, 2004

Dated: February 26, 2004

  
Steven Fischman

3. W. R. Bush, J.D. Pincus, and D. J. Sielaff, "A static analyzer for finding dynamic programming errors", Software Practice and Experience, 30 (7), June 2000, 775-802;
4. H. Chen and D. Wagner, "MOPS: an infrastructure for examining security properties of software", In Proc. of the Ninth ACM Conference on Computer and Communications Security, (Washington, DC, November 2002), 235-244;
5. J.D. Choi, M. Gupta, M.J. Serrano, V.C. Sreedhar, S. Midkiff, "Escape Analysis For Java", In Proc. of OOPSLA, October 1999, 1-19;
6. J. Corbett, M.Dwyer, J. Hatchliff, C. Pasareanu, Robby, S. Laubach, H. Zheng, "Bandera: Extractive Finite-state Models from Java Source Code", In Proc. of ICSE, June 2000;
7. D. L. Detlefs, "An overview of the extended static checking system", SIGSOFT Proceedings of the First Workshop on Formal Methods in Software Practice, January 1996, 1-9;
8. M. Emami, R. Ghiya, and L. Hendren, "Context-sensitive interprocedural point-to analysis in the presence of function pointers", In Proc. of PLDI, June 1994, 242-257;
9. D. Engler, B. Chelf, A. Chou and S. Hallem, "Checking System Rules Using System-Specific, Programmer-Written Compiler Extensions", In Proc. of SOSR, October 2000, 1-16;
10. D. Evans, "Static Detection of Dynamic Memory Errors", In Proc. of PLDI, May 1996, 44-53;
11. S. Hallem, B. Chelf, Y. Xie and D. Engler, "A System and Language for Building System-Specific, Static Analyses", In Proc. of PLDI, June 2002, 69-82;
12. D. Hovemeyer and W. Pugh, "Finding Bugs is Easy", <http://www.cs.umd.edu/~pugh/java/bugs/docs/findbugsPaper.pdf>;
13. D. Jackson, "Aspect: Detecting bugs with abstract dependencies", ACM Trans. on Software Engineering and Methodology, 4 (2), April 1995, 109-145;
14. "Java™ 2 Platform, Standard Edition, v 1.4.2 API Specification", <http://java.sun.com/j2sec/1.4.2/docs/api/index.html>;
15. L. Koved, "JABA-Java Bytecode Analysis", <http://www.research.ibm.com/javasec/JaBA.html>;
16. L. Koved, M. Pistoia, and A. Kershenbaum, "Access rights analysis for Java", In Proc. of OOPSLA, Nov 2002;

17. "Eclipse platform technical overview", Object Technology International, Inc.  
July 2001, <http://www.eclipse.org/whitepapers/eclipse-overview.pdf>;

18. "Automatic Java[™] software and component testing: using Jtest to  
automate unit testing and coding standard enforcement", Parasoft Corporation,  
<http://www.parasoft.com/jsp/products/article.jsp?articleId=839&product=Jtest>; and

19. J. Viega, J.T. Block, T. Kohno, G. McGraw, "ITS4: A Static Vulnerability  
Scanner for C and C++ Code", In Proc. of the 16<sup>th</sup> Annual Computer Security Applications  
Conference, December 2000, 257-269.

Applicants are submitting copies of the above-cited references.

Inasmuch as this Information Disclosure Statement is being submitted in  
accordance with the schedule set out in 37 C.F.R. §1.97(b), no petition, certification or fee is  
required.

Respectfully submitted,

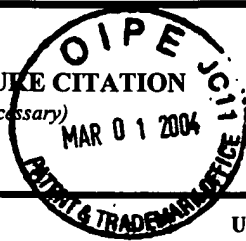


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# INFORMATION DISCLOSURE CITATION

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Group Art Unit

2121

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		D. Reimer, K. Srinivas, H. Srinivasan, B. Alpern, R. Johnson, A. Kershenbaum, L. Koved, "SABER: Smart Analysis Based Error Reduction", IBM Research, Hawthorne, New York
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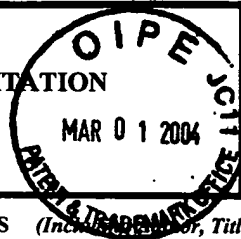
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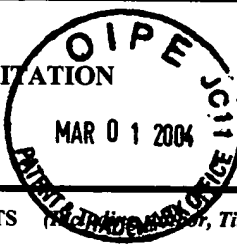
*EXAMINER INITIAL	OTHER DOCUMENTS (Include Author, Title, Date, Pertinent Pages, Etc.)
	W. R. Bush, J.D. Pincus, and D. J. Sielaff, "A static analyzer for finding dynamic programming errors", Software Practice and Experience, 30 (7), June 2000, 775-802
	H. Chen and D. Wagner, "MOPS: an infrastructure for examining security properties of software", In Proc. of the Ninth ACM Conference on Computer and Communications Security, (Washington, DC, November 2002), 235-244
	J.D. Choi, M. Gupta, M.J. Serrano, V.C. Sreedhar, S. Midkiff, "Escape Analysis For Java", In Proc. of OOPSLA, October 1999, 1-19
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	D. Engler, B. Chelf, A. Chou and S. Hallem, "Checking System Rules Using System-Specific, Programmer-Written Compiler Extensions", In Proc. of SOSR, October 2000, 1-16
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	D. Hovemeyer and W. Pugh, "Finding Bugs is Easy", <a href="http://www.cs.umd.edu/~pugh/java/bugs/docs/findbugsPaper.pdf">http://www.cs.umd.edu/~pugh/java/bugs/docs/findbugsPaper.pdf</a>
	D. Jackson, "Aspect: Detecting bugs with abstract dependencies", ACM Trans. on Software Engineering and Methodology, 4 (2), April 1995, 109-145
	"JavaTM 2 Platform, Standard Edition, v 1.4.2 API Specification", <a href="http://java.sun.com/j2sec/1.4.2/docs/api/index.html">http://java.sun.com/j2sec/1.4.2/docs/api/index.html</a>

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INITIAL

## OTHER DOCUMENTS

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L. Koved, "JABA-Java Bytecode Analysis", <http://www.research.ibm.com/javasec/JaBA.html>

L. Koved, M. Pistoia, and A. Kershenbaum, "Access rights analysis for Java", In Proc. of OOPSLA, Nov 2002

"Eclipse platform technical overview", Object Technology International, Inc. July 2001, <http://www.eclipse.org/whitepapers/eclipse-overview.pdf>

"Automatic Java[TM] software and component testing: using Jtest to automate unit testing and coding standard enforcement", Parasoft Corporation, <http://www.parasoft.com/jsp/products/article.jsp?articleId=839&product=Jtest>

J. Viega, J.T. Block, T. Kohno, G. McGraw, "ITS4: A Static Vulnerability Scanner for C and C++ Code", In Proc. of the 16th Annual Computer Security Applications Conference, December 2000, 257-269

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